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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,335	11/17/2000	Kevin Lefebvre	10005281-1	6005

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HEWLETT-PACKARD COMPANY  
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EXAMINER

TUNG, KEE M

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 04/01/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/715,335

Applicant(s)

LEFEBVRE ET AL.

Examiner

Kee M Tung

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action filed 3/15/04 is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, are rejected under 35 U.S.C. 102(b) as being anticipated by Molnar et al (PixelFlow: High speed rendering using image composition, hereinafter "Molnar"). Molnar teaches a graphical display system (Figs. 1 and 2) comprising a first and a second graphics pipelines (Fig. 1) configured to receive graphical data transmitted from a graphics application (such as, host in figure 2) and to render said graphical data received by said first and second graphics pipelines in parallel; a display device (Fig. 1) configured to display an image; and a compositor (Fig. 1) configured to receive said graphical data rendered by said first and second graphics pipelines, said compositor further configured to interface with said display device and displaying said graphical data. Molnar further teaches the PixelFlow performs antialiasing by supersampling (page 234, col. 1, top) and PixelFlow software consists of two parts: rendering software and control software (page 237, col. 1). Molnar also teaches in screen subdivision approach, screen is divided into disjoint regions of contiguous pixels, and a rasterization

processor is provided for each region (Fig. 1a). The processors simultaneously rasterizer primitives that fall into different screen regions (discard other regions). Therefore, at least claims 1-6, 9-14, 15-17, 18-26, 29-42, 52, 54, 55 and 57-61 are anticipated by Molnar.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 11-13, 29, 40-42, 43-51, 56, 58 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molnar et al (PixelFlow: High-speed rendering using image composition, hereinafter "Molnar") in view of Applicant's admitted prior art (Fig. 2 of the drawings and the respective areas of the specification, hereinafter "Prior Art").

The teachings of Molnar are given in previous paragraph of this Office action. However, Molnar fails to explicitly suggest or teach said interface coupled to the first and second graphics pipelines via LAN connections. This is what prior art teaches. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teaching of LAN connection of Prior Art into the system of Molnar because LAN is old and well known and well used in the art in order to communicate multiple computers together. Therefore, at least claim 56 would have been obvious.

Prior art further teaches each graphics pipeline rendering portion of the image and discard other portion (page 3, first full paragraph). Therefore, at least claims 9, 11, 12, 13, 29, 40-42, 58 and 60 would have been obvious.

As per claims 43-51, Prior art further teaches a logic (45) configured to receive graphical data defining a 3D graphical object to be displayed in a single graphical window.

6. Claims 7, 8, 27, 28, 43-51, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molnar et al (PixelFlow: High-speed rendering using image composition, hereinafter "Molnar") in view of DiNicola et al (5,394,524 hereinafter "DiNicola").

The teachings of Molnar are given in previous paragraph of this Office action. However, Molnar fails to explicitly suggest or teach a third graphics pipeline. This is what DiNicola teaches (such as, 2D pipeline 306, 301 and 3D pipelines 306, 303). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of DiNicola into the system of Molnar in order to improved graphical computation to efficiently process a graphics data stream as taught by DiNicola (col. 1, lines 15-20). Therefore, at least claims 7, 8, 27, 28, and 53 would have been obvious.

As per claims 43-51, the combined system additionally teaches a logic (DiNicola, 306) configured to receive graphics data.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-61 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kee M Tung whose telephone number is 703-305-9660. The examiner can normally be reached on Tuesday - Friday from 5:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kee M Tung  
Primary Examiner  
Art Unit 2676